Chapter 1

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Subsystem Overview

Accounts Receivable Subsystem

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Subsystem Overview
Accounts Receivable Subsystem

About this Chapter . . .

This chapter introduces the basic terms and ideas that are discussed throughout the IFMS Accounts Receivable Subsystem section. In this section, you will learn:

- Introduction to the IFMS Accounts Receivable Subsystem
- Introduction to the Accounts Receivable Transactions
- Accounts Receivable Processing
- General Information About the Accounts Receivable Subsystem
- Accounts Receivable Offline Processing

This documentation is current as of the 5.1E7 subrelease.

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Introduction

IFMS is divided into multiple subsystems. The Accounts Receivable Subsystem is one of these. This volume of the IFMS Users Guide provides information on the Accounts Receivable Subsystem.

Using the Accounts Receivable Subsystem, you can:

- Bill customers for items and services.
- Record the collection of funds and apply against an accounts receivable, or they may be isolated transactions with no reference.
- Collect travel advances either directly against a travel order or by referencing an accounts receivable.
- Calculate and post interest, administrative charges, and penalty charges for overdue receivables.
- Select bills for write-off or referral to collection agencies.

? Note

Travel-related receivables, such as airline receivables, are integrated with the Accounts Receivable Subsystem; however, they are discussed in the Travel Subsystem documentation. Please refer to the Travel Subsystem volume of the IFMS User's Guide for more information.

Subsystem Transactions

IFMS uses two different types of transactions in the Accounts Receivable Subsystem.

Billing Document

A **billing document** is used to record your claim against customers or employees for money, goods, or services.

Example

An employee receives a travel advance that is in excess of the cost of the trip. The billing document is used to bill the employee for the amount that is to be returned to the EPA.

Cash Receipt

A cash receipt records the collection of funds and the receipt of payment from a debtor.

Example

When the employee repays the outstanding advance amount it is recorded using a cash receipt.

Overview of the Processing Cycle

An **accounts receivable chain** is the series of accounting procedures and paper flows for billing customers and collecting funds. IFMS divides accounts receivable into allowance holder refund, appropriation level and revenue recognition. Each of these accounting events are described below. Exhibit 1 shows several common accounts receivable chains used within IFMS.

Allowance Holder Refund

An allowance holder refund decreases a previously recorded expenditure. The funds for the amount of the receivable are returned to the budget that is recorded in the receivable line.

Example

We overpay a vendor for an item. A receivable is recorded for the amount of the overpayment which restores the amount back to the budget, thereby decreasing expenditures and increasing the allowances available.

Appropriation Level

Appropriation level receivables and collections are not recorded against an allowance holder's budget. They are recorded with a budget fiscal year and appropriation.

Example

We bill an attorney for documents provided under the Freedom of Information Act.

Revenue Recognition

Revenue recognition type receivables and collections are recorded for interest, handling and penalty assessments on overdue accounts receivables. This is the only case. The revenue source code is always 50.

Example

We charge interest on overdue receivables, and the interest is then posted to revenue source code 50.

The Accounts Receivable Chains

Example	Accounts Receivable Chain		
The EPA overpays a vendor for a service	Bill the vendor for the overpayment	-->	When you receive the refund from the vendor, record the cash receipt restoring the amount back to the budget.
The EPA overpays a vendor for a service. However, the vendor repays you for the overpayment before you send out a bill			Record the receipt of cash from the vendor using a CR transaction.
A vendor owes your agency money for services that the EPA performed for the vendor	Bill the vendor for the services rendered (i.e., we bill an attorney for documents provided under the Freedom of Information Act).	-->	When you receive the payment from the vendor, record the cash receipt
An employee does not use the entire amount of a travel advance	Bill the employee for the amount of the advance used on the trip	-->	When you receive the amount due from the employee, record the cash receipt

Exhibit 1

Using Accounts Receivable Chains

All of these accounting steps do not have to be included in every accounts receivable chain; however, the relative sequence of the accounting events must be followed.

For example, your accounts receivable chain could begin by entering a cash receipt without first entering a billing document. Your accounts receivable chain could not, however, begin with a cash receipt, followed by a billing document, because this chain does not follow the sequence of the accounting events. Exhibit 2 shows the account receivable chains that are valid in IFMS.

IFMS Accounts Receivable Chains

Example	You Enter These Documents to Form an Accounts Receivable Chain		
The EPA overpays a vendor for a service	**BD** Bill the vendor for the overpayment	-->	**CR** When you receive the refund from the vendor, record the cash receipt restoring the amount back to the budget
The EPA overpays a vendor for a service. However, the vendor repays you for the overpayment before you send out a bill		-->	**CR** Record the receipt of cash from the vendor
The vendor owes EPA money for services that the EPA performed for the vendor	**BD** Bill the vendor for the services rendered (i.e., we bill an attorney for documents provided under the Freedom of Information Act.	-->	**CR** When you receive the payment from the vendor, record the cash receipt
An employee does not use the entire amount of a travel advance	**BD** Bill the employee for the amount of the advance not used on the trip	-->	**CR** When you receive the amount due from the employee, record the cash receipt

Exhibit 2

When to Use Different Types of Accounts Receivable Chains

In IFMS, you can use a different type of accounts receivable chain depending on the circumstances relating to the receivable. For instance, suppose the EPA overpays a vendor for a service. If the EPA realizes the mistake they will bill the vendor using a BD and record the payment using a CR. If however, the vendor realizes the mistake before the EPA does, and the vendor repays the EPA before a BD has been entered, a CR will be entered into IFMS without a BD being entered.

Using Documents to Create Accounts Receivable Chains

You create accounts receivable chains in IFMS by entering accounts receivable transactions. Each accounts receivable transaction represents an accounting step in your accounts receivable chain. The type of accounts receivable transactions used depends on the circumstances related to the receivable.

Exhibit 3 lists each type of accounts receivable transaction, the transaction's corresponding accounting step, and the appropriate uses for each of the transactions.

Accounts Receivable Transaction Codes

Accounting Step	Accounts Receivable Transaction	Transaction Code	What the Transaction Records
Receivable	Billing Document	BD	Records accounts receivable to appropriated funds or miscellaneous receipts.
Receivable	Cash Receipt	CR	Records collections for previously established accounts receivable, collections with no previously established accounts receivable or funds received as advances.
Receivable	Write-Off	WR	Records write-offs to specified accounts receivables.

Exhibit 3

General Information About the Subsystem

The following information describes issues and features of the Accounts Receivable Subsystem.

Linking Transactions Together

Accounts Receivable and collections are linked together by referencing. Referencing enables IFMS to close accounts receivables that are collected. Both the Billing Document (BD) and the Cash Receipt (CR) contain fields for referencing a prior transaction but only the CR has any accounting significance. Exhibit 4 shows the types of transactions that Billing Documents and Cash Receipts can reference.

Transactions Referenced by the Accounts Receivable Subsystem

Transaction	Transactions that can be Referenced	Referencing Information
Billing Document (BD)	Billing Document (BD) Contract Disbursement (CD) Direct Payment (DP) Interagency Agreement (IG) Travel Order (TO) Payment Voucher (PV) Direct Disbursement (DD) Imprest Fund Reimbursement (IF) Travel-Related Payment Voucher (TP)	When Billing Documents reference other transactions they do not liquidate or "pull in" accounting information from the referenced transactions.
Cash Receipt	Billing Document (BD) Contract Disbursement (CD) Direct Payment (DP) Interagency Agreement (IG) Travel Order (TO) Payment Voucher (PV) Direct Disbursement (DD) Imprest Fund Reimbursement (IF) Travel-Related Payment Voucher (TP) Transportation Billing (TB)	Cash Receipts only liquidate referenced Billing Documents and Travel Orders. You can reference other transaction types using the Cash Receipt, but IFMS will not liquidate these transactions or "pull in" any accounting information.

Exhibit 4

IFMS Transactions and Tables

When transactions are processed in IFMS, they update tables. There are many transactions and tables in the Accounts Receivable Subsystem. Exhibits 5 and 6 list all transactions and tables included in the IFMS Accounts Receivable Subsystem. The transaction processing and accounts receivable tables chapters of this volume provide detailed information concerning these transactions and tables.

Accounts Receivable Transactions

Transaction Name	Transaction ID
Billing Document	BD
Cash Receipt	CR
Write-Off	WR

Exhibit 5

Accounts Receivable Tables

Table Name	Table ID
Accounts Receivable Case History Line Table	ARCL
Receivable Header Table	ARHT
Receivable Line Table	ARLT
Accounts Receivable Control Options Table	AROP
Accounts Receivable Text Table	ARTX
Cause of Overpayment Table	CAUS
Cash Receipt Header Table	CRHT
Cash Receipt Line Table	CRLT
Installment Billing and Payment Table	INBT
Outstanding Billing Documents Table	OBDT
Overdue Status Code Table	OSCT
Source Data Table	SRCE
Type of Overpayment Table	TYOP
Write-Off Reason Code Table	WORC
Write-Off Table	WROT

Exhibit 6

Information Entered on Accounts Receivable Transactions

Depending on the type of transaction that you are recording, you enter different types of information on Billing Documents (BDs) and Cash Receipts (CRs). Two such types of information are accounting dimensions and payer codes.

Accounting Dimensions

Accounting dimensions are a combination of codes that define to IFMS which budget a transaction should be processed against. Each Accounts Receivable transaction must contain, at least, the following codes:

Appropriation

Budget Fiscal Year

In addition, depending on the type of transaction, you may be required to enter additional information. For allowance holder refunds you must enter the components of the 10-digit account number (organization and program element) and the Budget Object Code. Revenue type transactions must have an Organization Code and a Revenue Source Code.

Exhibit 7 shows when a Budget Object Code or a Revenue Source Code is required for a particular transaction.

Budget Object Code / Revenue Source Requirements

Accounting Event	Budget Object Code (BOC) Required	Revenue Source Code Required
Allowance Holder Refund	N	Y
Appropriation Level	N	N
Revenue Recognition	Y	N

Exhibit 7

Payer Codes

The Payer Code specifies the person or organization that owes us the amount of money entered on the Billing Document. For collections, it is the person or organization that paid us a sum of money whether billed or not.

In IFMS, there are two types of payers: vendors and providers. A **vendor** provides a service or product to the EPA and is someone for whom a payable may be established. A **provider** is someone for whom the EPA provides a service for or who owes money to the EPA and for whom a receivable may be established. You define a debtor as either a vendor, a provider, or both by setting the Vendor Provider flag on the Vendor Table (VEND). The easiest procedure is to use **'B'** for both vendor and provider. This way all accounts receivable transactions can be entered for a particular vendor.

Depending on the type of accounting event that you enter on the transaction, IFMS requires that only certain types of payer codes can be entered. Exhibit 8 summarizes when each payer code can be used with an accounting event.

Payer Code Use

Payer	Value of Vendor/Provider flag on the Vendor Table (VEND)	Used with these Accounting Events
Provider	P	Allowance Holder Refund
Vendor	V	Appropriation Level
Both Vendor and Provider	B	Revenue Recognition

Exhibit 8

Checks IFMS Performs When Referencing

In addition to the normal checks that IFMS performs during the referencing process, IFMS uses the outstanding receivable balance of a Billing Document (BD) line as an amount ceiling for any Cash Receipts (CRs) that reference that line. If a Cash Receipt exceeds the open receivable balance line that it is referencing, you must enter the difference on a separate line that does not reference that particular Billing Document line.

Example

Suppose you enter a Billing Document for $278,000. The total of all Cash Receipts referencing that Billing Document cannot exceed $278,000.

If you enter three Cash Receipts, each for $100,000, referencing that Billing Document line, IFMS will accept the first two transactions and reject the last Cash Receipt.

An acceptable way to enter the last Cash Receipt would be for you to enter two lines on the Cash Receipt. The first line would reference the Billing Document for $78,000. For the second line, you would not specify a transaction reference. Instead, you would simply enter the Cash Receipt line for $22,000.

Standard Collection Process

Exhibit 9 shows the steps that you may perform using IFMS during a standard collection process.

Standard Collection Process

Step	What Occurs at Each Step
Track Case History	Determine if you want to use the Accounts Receivable Case History Line Table (ARCL) to track billing and collection of receipts.
Create Receivables	Enter Billing Documents (BDs) to bill for any amounts due to EPA
Generate Bills	Run an offline process that selects bills for printing. IFMS prints the bills overnight.
Collect Funds	Enter Cash Receipts (CRs) to record the collection of funds.
Bill for Overdue Charges	Run an offline process that calculates whether or not interest, administrative charges, or penalty charges should be applied to the receivable.
Create Dunning Letters	For overdue bills, run an offline process to create dunning letters that inform debtors that their payments are late.
Write Off Bad Debts	Enter Cash Receipts (CRs) to write off any debts that are not going to be paid, or you can run an offline process to select overdue documents for write offs.

Exhibit 9

Tracking the Case History of a Receivable

You determine on a case-by case basis whether a particular receivable will update the Accounts Receivable Case History Line Table (ARCL). This table contains information about a receivable up to, and including the receipt of the final payment for the receivable. Information that IFMS updates this table with includes:

- The transaction date
- Information from Billing Documents (BDs) and Cash Receipts (CRs) that refer to this receivable
- The type of bill generated for the receivable
- The receivable's transaction amount
- The receivable's outstanding balance
- If the receivable was subject to any interest, administrative charges, or penalty charges
- If any dunning letters were sent for the payment of the receivable
- If the receivable was written off

The Accounts Receivable Case History Line Table must be used for receivables using an installment payment plan, because IFMS uses information from this table to generate installment bills. It is also recommended that this table be used for bills printed on a continuous basis. The ARCL table is not required for other types of receivables, however, the table does provide information that may be helpful when tracking the payment of receivables.

Setting Up Receivables for Inclusion in ARCL

There are two methods that you can use to specify that a receivable should be included on the Accounts Receivable Case History Line Table (ARCL):

Users will have the option of using case history on an individual receivable basis.

If you did not specify the option on the Accounts Receivable Control Options Table (AROP) or if you want to override the Case History flag, you can indicate on a specific Billing Document (BD) that the receivable should be included on the Accounts Receivable Case History Line table.

? Note

The Case History Flag on the AROP table is set to **Y** in IFMS for the EPA. Therefore, all receivables will automatically be recorded in the ARCL table.

Creating a Receivable

The Billing Document (BD) records claims against customers for money, goods, or services, and creates a receivable. On the Billing Document, you can specify that the receivable is for revenue, a vendor (expenditure) refund, or an advance.

In addition to recording the type of receivable, you can specify on the Billing Document:

The collection due date for the receivable.

If you do not specify a collection due date, during the nightly cycle, IFMS will post a collection due date that is equal to the print bill date plus 30 days.

If interest, administrative charges, or penalty charges should be waived if the receivable becomes overdue.

If you want IFMS to maintain a billing history for the receivable on the Accounts Receivable Case History Line Table (ARCL).

For installment bills, you must use the Accounts Receivable Case History Line Table:

If you want a bill to be printed for the receivable.

Bills can be printed, not printed, suppressed (IFMS will update the inquiry tables with information about the bill, but no bill will be printed), or printed continuously (monthly, etc.) until the bill is paid off or closed. In addition, you can also maintain bills that have been printed externally. These bills will not be printed again by IFMS.

Checks IFMS Performs on Billing Documents (BDs)

In addition to normal processing checks, IFMS performs the following checks on Billing Documents (BDs):

On decrease modification transactions and cancellations, IFMS checks that the Billing Document line amount cannot be decreased to less than the portion of the Billing Document already closed.

On decrease modification transactions and cancellations for a vendor refund, IFMS checks that the Billing Document line amount does not cause the referenced budget lines to become negative if Full Control is in effect for that budget line.

When reclassifying a travel advance as a receivable, IFMS checks that the advance balance is not reduced below zero.

Generating a Bill

This section describes how IFMS generates bills using information that you entered on Billing Documents (BDs). However, before discussing the Automatic Bill Generation process, we'll discuss how

to set up installment bills, continuous bills, how to set up a bill that was printed externally, and how to enter text for printing on a bill.

Setting up Installment Bills

In most instances, bills are generated for the outstanding balance that a debtor owes to your agency. However, in IFMS you can also generate installment bills. **Installment bills** request that the debtor pay a predefined amount of their outstanding balance each time a bill is received.

To generate installment bills, you must first establish the receivable by entering a Billing Document (BD). The Billing Document must have Case History maintained. Then you enter the terms of the installment plan (i.e., the amount and the frequency that the debtor will pay the bill) in the Installment Billing and Payment Table (INBT).

? Note

If you do not specify that an installment receivable should be included on the Accounts Receivable Case History Line Table (ARCL), IFMS creates an entry on the table with the receivable balance that currently exists on the Open Billing Documents Table (OBDT) and sets the Case History flag on the Receivable Header Table (ARHT) to **Y**.

You can deactivate the installment plan by setting the Active Indicator on the Installment Billing and Payment table to **N**. In addition, if the indicator is **N**, you can change the installment plan amount.

Penalties and Past Due Installments

If any penalty charges are assessed against the receivable, IFMS automatically deactivates the installment plan.

If you re-negotiate a new installment plan with a past-due debtor, reset the Active Indicator to **Y** and update the Effective Date field on the Installment Billing and Payment table. Note that if you do not

update the Effective Date field, cash receipts will be applied to the past due amount, not to the re-negotiated amount.

Setting up a Continuous Bill

Instead of generating a bill only one time, you can create the same bill on a recurring basis. For example, suppose an organization owes your agency money for rent each month. Using continuous bills, you can automatically generate the monthly bill for the rent.

To generate a continuous bill, set the Bill Print Indicator on the Billing Document (BD) to **C**. After the bill is printed for the first time, IFMS prints the bill each time the calculation in Exhibit 10 is true:

Setting up a Continuous Bill

The Last Bill Date on ARHT	+	Cycle Days on AROP	≥ The TO DATE parameter entered with the Billing Generation program

Exhibit 10

? Note

When printing continuous bills, it is recommended that Case History is maintained for the Billing document so that details about cash collections and overdue charges are printed on the bill.

Setting Up a Bill that was Printed Externally

By entering information on a Billing Document (BD), you can record and track bills that were printed externally (outside of IFMS).

To set up a bill that was printed externally, set the Bill Print Indicator on the Billing document to **E**. When IFMS processes the transaction, the following occurs:

The Collection Due Date on the Receivable Header Table (ARHT) is set to the Document Date plus the Cycle Days on the Accounts Receivable Control Options Table (AROP).

The Bill Print Date and the Last Bill Date on the Receivable Header Table is set to the transaction date.

The Billed Amount and the Last Bill Amount on the Receivable Header Table is set to the transaction amount.

The Appeal Expiration date on the Debt Appeal Table (APPL) is set to the transaction date plus the Debt Appeal Days on the Accounts Receivable Control Options Table.

When the Bill Generation program is run, IFMS changes the Bill Print Indicator from **E** to **P**. However, at this point, no table updates will occur and the bill will not be printed.

Example

If a bill that was generated externally of IFMS is somehow lost, you can use IFMS to re-print the bill.

? Note

You cannot modify the Bill Print Indicator to **E**.

Printing Text on Bills

You print text on bills by entering text associated with a Billing Document (BD) on:

The Accounts Receivable Text Table (ARTX)

The Text Clause Table (CLTX)

Exhibit 11 illustrates how IFMS selects text for printing on bills.

How IFMS Selects Text for Printing on Bills

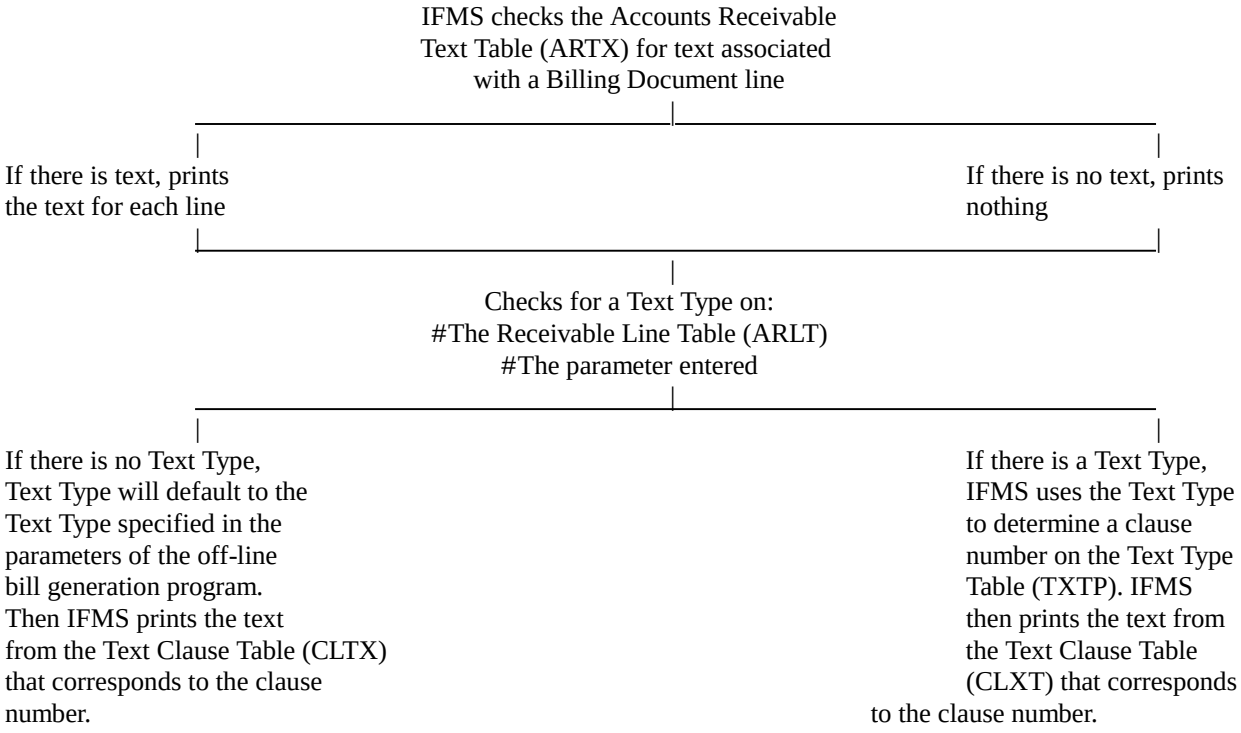


Exhibit 11

The Bill Generation Process

You can print bills using information from receivables by running an offline batch process. This process checks each outstanding receivable, and either:

- # Does not print a bill.
- # Does not print a bill, but performs updates to all inquiry tables.
- # Prints a bill for one receivable.

In addition, if a Collection Due Date was not specified or defaulted on the Billing Document (BD), IFMS calculates the due date during the Bill Generation process. The calculation is shown in exhibit 12:

Due Date Calculation

Collection Due Date =	Date that IFMS generates the bill (not the transaction's date)	+	Number of Cycle Days from AROP

Exhibit 12

Exhibit 13 indicates how IFMS determines when to print a bill. For IFMS to print a bill the payer code from the Vendor Table must have a valid accounting point in the 'Home Org' field.

Determining When to Print a Bill

IFMS determines if a bill should be printed by checking the Bill Print Indicator on the Outstanding Billing Documents Table (OBDT)	-->	If the value is **E** (External), no bill will be printed. However, IFMS sets the Bill Print Indicator to **P**. (All table updates occurred at the time the Billing Document was processed)
	-->	If the value is **N** (No), or **P** (Printed), no bill will be printed or tables updated
	-->	If the value is **S** (Suppress), no bill will be printed. However, IFMS updates all tables as if a bill was printed. Once the bill is printed, IFMS sets the Bill Print Indicator to **P**
	-->	If the value is **Y** (Yes), IFMS will generate a bill. IFMS also sets the Bill Print Indicator to **P**. Note that for installment bills, the value will remain a **Y**. The installment bill will only be printed again if the Last Bill Date + Number of Days based on the Installment Billing and Payment Table (INBT) Frequency Flag $\geq$ the To Date entered with the Billing Generation Program
	-->	If the value is **C** (Continuous), IFMS will generate a bill. Once IFMS prints a bill for the first time, the bill will only be printed again if the Last Bill Date + the Cycle Days from the Accounts Receivable Options Table (AROP) $\geq$ the To Date entered with the Billing Generation Program

Exhibit 13

Reprinting Bills

Bills can also be reprinted using the Bill Generation Program. To reprint a bill, specify the Reprint Date parameter when the Bill Generation program is run. IFMS prints all bills with a Last Bill Date on the Receivable Header Table (ARHT) equal to the Reprint Date parameter.

All bills generated as reprints reflect the current receivable balance (for example Cash Receipt Documents (CRs) that reference this receivable after the Reprint Date change the receivable's balance).

? Note

When Billing Documents (BDs) with a Bill Print flag of **S** (suppress) are reprinted, the bill will actually *print* for these transactions.

Collecting Funds

To record the collection of funds and the receipt of payment from a debtor, you enter Cash Receipts (CRs). Types of accounting events that you can record on a Cash Receipt include revenue recognition, balance sheet transfers (e.g., advances), and expenditure (vendor) refunds. These events were described earlier in this chapter.

Entering Cash Receipts (CRs)

Information about the collection of funds is entered on the Cash Receipt. This information includes:

- The deposit number for the payment and the total amount of the transaction
- If the payment is from another agency, the Treasury symbol of that agency.
- If you are recording the collection of all or part of an outstanding travel advance, the Travel Type.

Clearing Order for Cash Receipt Lines

For receivables that are overdue, you can enter the receipt of any overdue charges on the Cash Receipt (CR). You must enter each individual overdue charge payment on a separate line, and the lines must be entered in the order specified in the Cash Receipt Posting field on the Accounts Receivable Control Options Table (AROP). If they are not, IFMS will issue an overrideable error.

The value in the Cash Receipt Posting field defines for IFMS the order in which the charges should be cleared. Exhibit 14 shows the possible values of the Cash Receipt Posting field, and the required clearing order for each value.

Values and Clearing Order for the Cash Receipt Posting Option on AROP

I	A	O	P
Interest Charges	Administrative Charges	Outstanding Principal	Penalty Charges
Administrative Charges	Interest Charges	Interest Charges	Administrative Charges
Penalty Charges	Penalty Charges	Administrative Charges	Interest Charges
Outstanding Principal	Outstanding Principal	Penalty Charges	Outstanding Principal

Exhibit 14

Confirming the Deposit of a Cash Receipt

The accomplished date is the date that appears on the SF-224. The SF-224 is a statement of all your agency's cash transactions. Unless you enter an accomplished date, IFMS considers the Cash Receipt (CR) accomplished when entered and sets the accomplished date to the transaction date.

Checks IFMS Performs on Cash Receipts (CRs)

In addition to the normal processing checks that IFMS performs on Cash Receipts (CRs) for each transaction line, IFMS checks that:

The Cash Receipt's Line Amount does not exceed the outstanding amount of any referenced Billing Document Line Amount.

When recording refunds for travel advances, the resulting travel advance balance does not exceed zero.

Billing for Overdue Charges

If full payment for a receivable is not received by the collection due date, the Overdue Charges offline batch process determines if the receivable is subject to interest, administrative charges, or penalty charges based on:

The debtor's vendor type

The age of the bill

If you specified that any of these charges should be waived

Any overdue charges that IFMS determines should be applied to the receivable are posted to the receivable’s entry on the Receivable Header and Line Tables (ARHT and ARLT) using the accounting dimensions specified on the Accounts Receivable Control Options Table (AROP).

? Note

You can manually calculate interest, administrative charges, and penalty charges, and manually enter these charges on the Billing Document.

Selecting Receivables for Interest Charges

An **interest charge** is a fee applied to an amount due that is not paid on time. This fee is adjusted according to when the amount due is actually paid. IFMS selects receivables that are eligible for interest charges by checking the Bill Print Date field on the Receivable Header Table (ARHT). If the Bill Print Date field is earlier than the Current Date, the bill may be eligible for interest. Exhibits 15 and 16 show:

How IFMS calculates the Interest Date by which interest should be charged

How IFMS determines if interest should be applied or waived

Step 1A. IFMS Calculates the Interest Date if Interest has Not Previously Been Applied

IFMS calculates the Interest Date, which is the date that interest should be applied

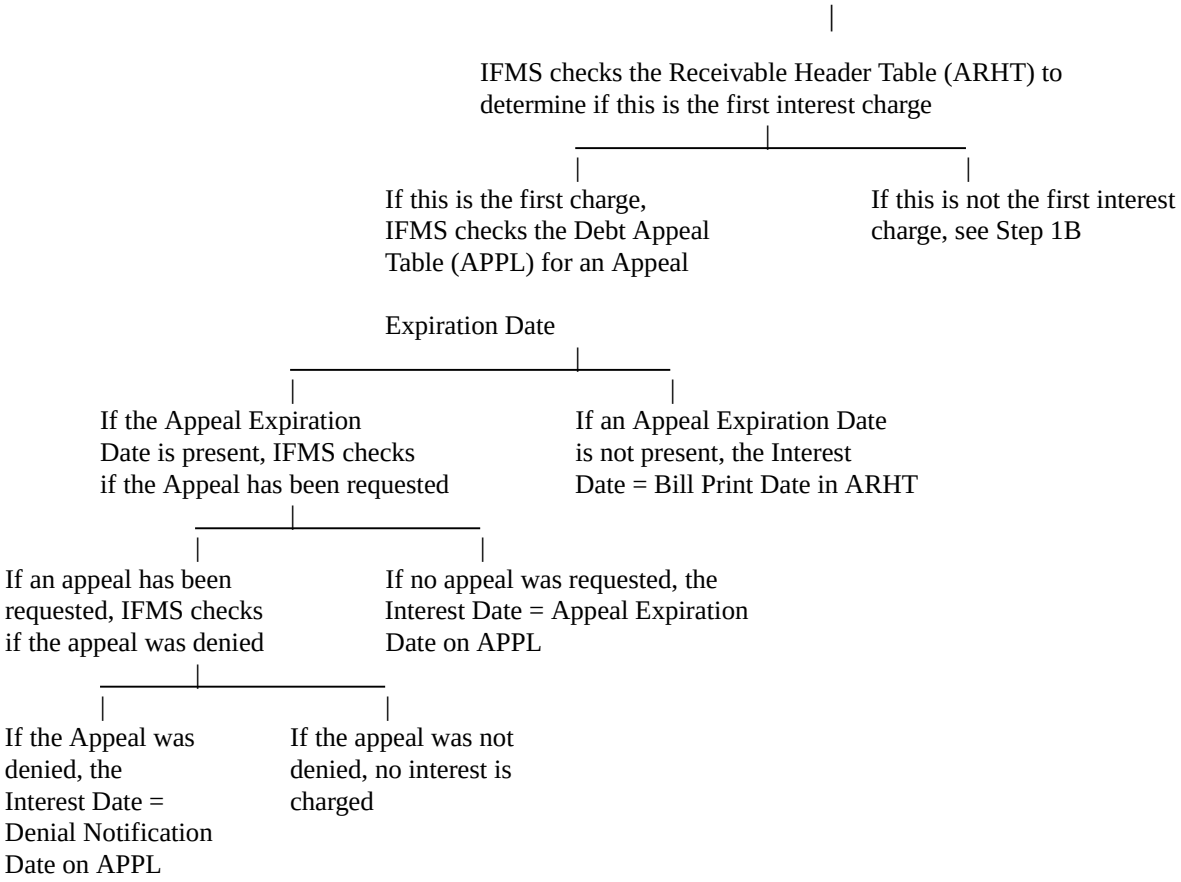


Exhibit 15

Step 1B. IFMS Calculates the Interest Date if Interest has been Previously Applied

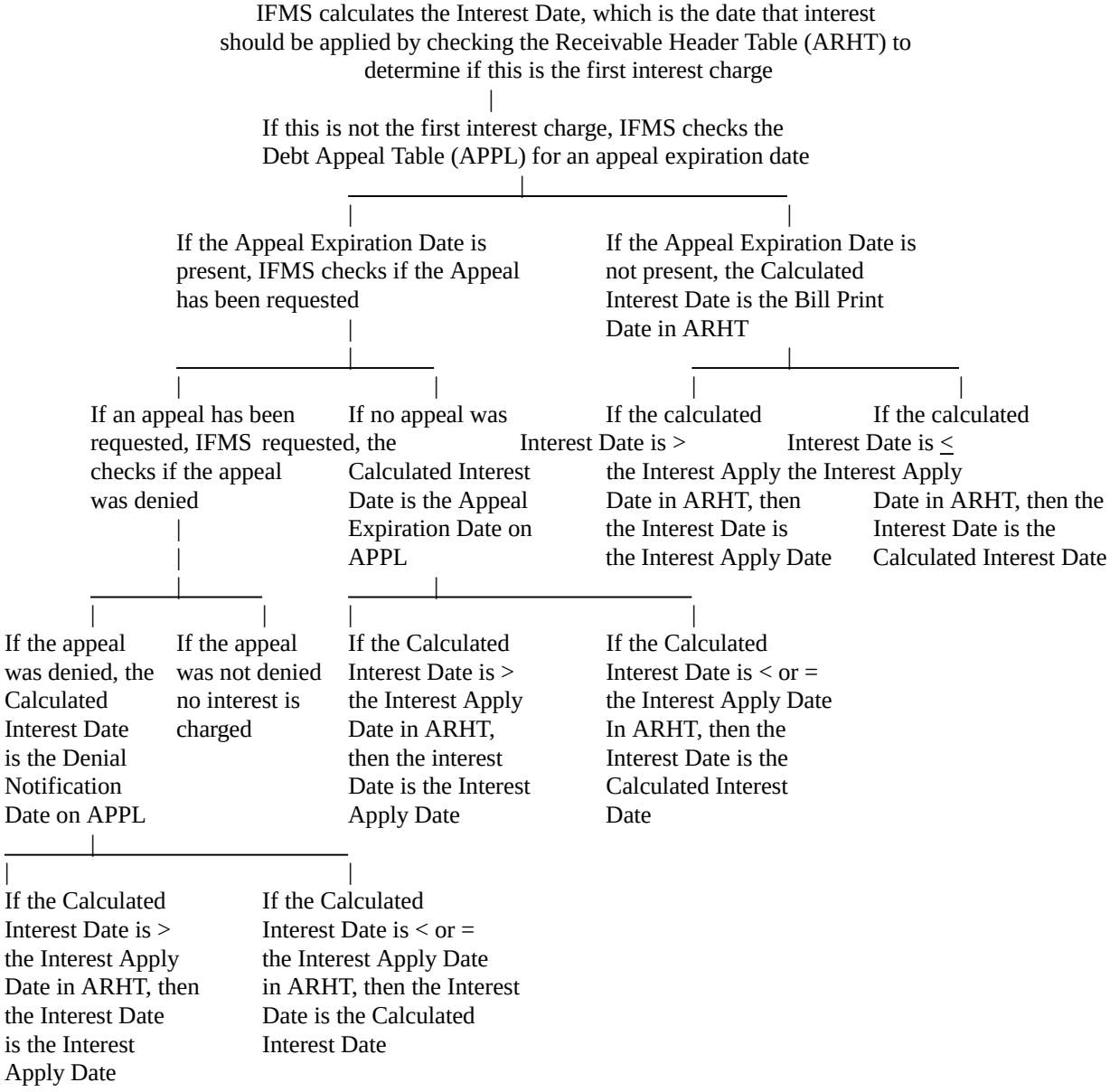
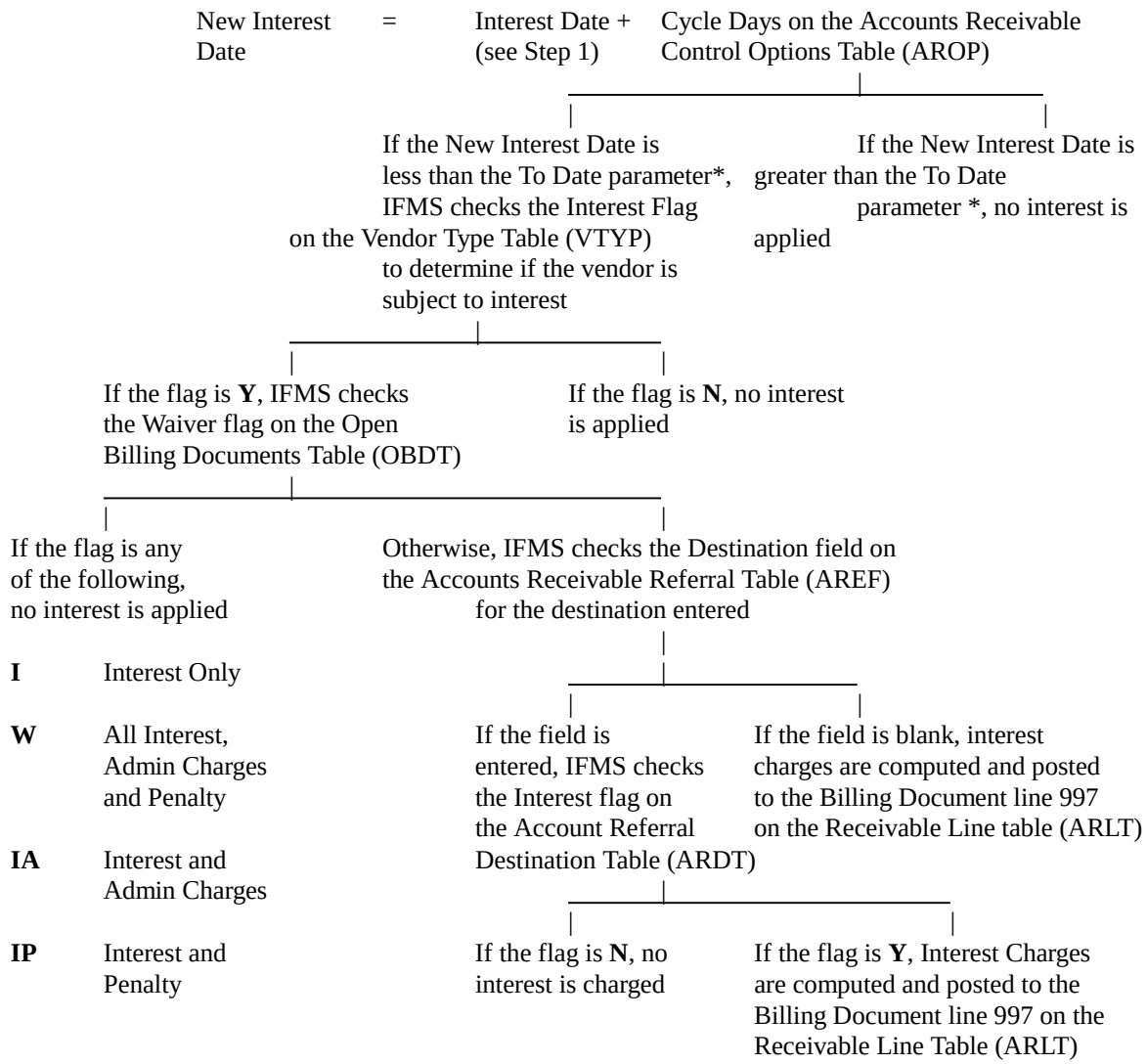


Exhibit 15 (continued)

Step 2. IFMS Determines if Interest Should be Applied or Waived

To determine if interest should be applied, IFMS calculates the New Interest Date as follows:



*** The To Date parameter is specified when the Overdue Charges batch process is run**

Exhibit 16

How IFMS Calculates Interest Charges

After IFMS determines that a receivable is subject to interest, IFMS calculates the amount of interest to apply to the receivable. The Interest Amount calculation is shown in Exhibit 17:

Interest Amount Calculation

$$\text{Interest Amount} = \left[\frac{\text{Outstanding Principal Amount}}{\text{Days in the Year}}\right] \left[\text{Interest Days}\right]$$

Exhibit 17

The Interest Rate is taken from the Receivable Line Table (ARLT). Exhibit 18 shows the equations that are used to calculate Interest Days in the above equation.

Interest Days Calculation

$$\text{Interest Days} = \left[\text{Interest Period truncate to whole period}\right] \left[\text{Interest Days on AROP}\right]$$

$$\text{Interest Period} = \frac{\text{Total Interest Days}}{\text{Interest Days on AROP}}$$

$$\text{Total Interest Days} = \text{To Date - parameter*} \quad \text{Interest Date calculated in Step 1}$$

*** Specified when the Overdue Charges batch process is run**

Exhibit 18

After the amount of interest is calculated, IFMS posts the interest amount, using the accounting dimensions specified on the Accounts Receivable Control Options Table (AROP), to the receivable's line number 997 on the Receivable line table. Subsequent interest charges will also be applied to this line. Exhibits 19-22 illustrates how interest charges are calculated.

Interest Example

Suppose:

You enter a Billing Document (BD), subject to interest, for $100.00

A bill was sent on October 15, 1992 with a Collection Due Date of November 14, 1992

The To Date parameter is November 25, 1992, and you've received no collection for the receivable

The Interest Rate is 10% and the Interest Lag Days in the Accounts Receivable Control Options Table (AROP) is 30 days

First, IFMS calculates the Total Interest Days as illustrated in Exhibit 19:

Total Interest Days =	To Date parameter - Interest Date calculated in Step 1
=	November 25, 1992 - October 15, 1992
=	41 days

Exhibit 19

Next, IFMS calculates the Interest Period as illustrated in Exhibit 20:

Total Period =	$\frac{\text{Total Interest Days}}{\text{Interest Days in AROP}}$
=	$\frac{41 \text{ Days}}{30 \text{ Days}}$
=	1.367

Exhibit 20

After determining the number of Interest Periods, IFMS calculates the Interest Days as shown in Exhibit 21:

Interest Amount =	[	Interest Period truncated to a whole number	]	[	Interest Days on AROP	]
=	[	1.367 truncated to 1.000	]	[	Interest Days on AROP	]
=		(1.000)(30 days)				
=		30 Days				

Exhibit 21

Now, IFMS can calculate the Interest Amount using the values calculated above, and apply that amount to the Billing Document (see Exhibit 22).

Interest Amount Calculation

Interest Amount =	[	$\frac{\text{Outstanding Principal Amount Interest Days in the Years}}{}$	]	[	Interest Day	]
=	[	$\frac{(1.000)(10.0\%)}{366 \text{ (for leap year)}}$	]	[	30 days	]
=		(.027)(30)				
=		.81				

Exhibit 22

The total amount of interest applied to this Billing document is 81 cents.

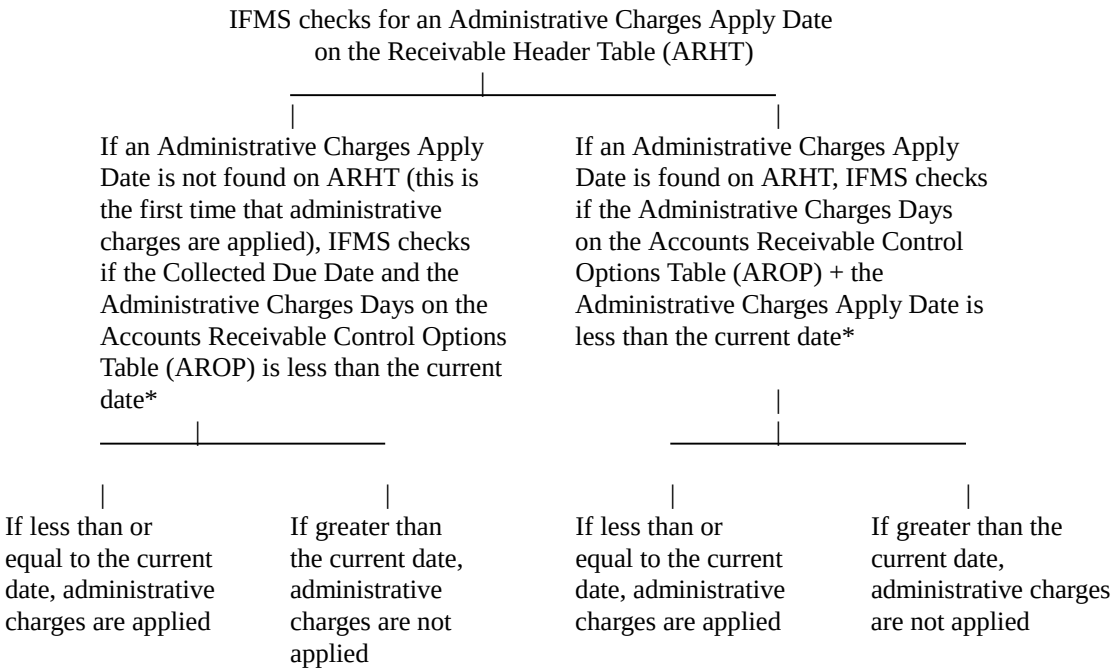
Applying Administrative Charges to Receivables

An **administrative charge** is a charge to the debtor for the costs of administering an overdue account. There are two types of administrative charges: a flat charge or an administrative (percentage) rate. You specify the type of charge that you want IFMS to use on the Accounts Receivable Control Options Table (AROP).

The three exhibits (23-25) that follow illustrate how IFMS:

- Selects receivables for administrative charges
- Determines if administrative charges should be applied or waived
- Computes the administrative charge amount

Step 1. IFMS Selects Receivables for Administrative Charges



*** The current date is the date that the Overdue Charges batch process is run**

Exhibit 23

Step 2. IFMS Determines if Administrative Charges Should be Applied or Waived

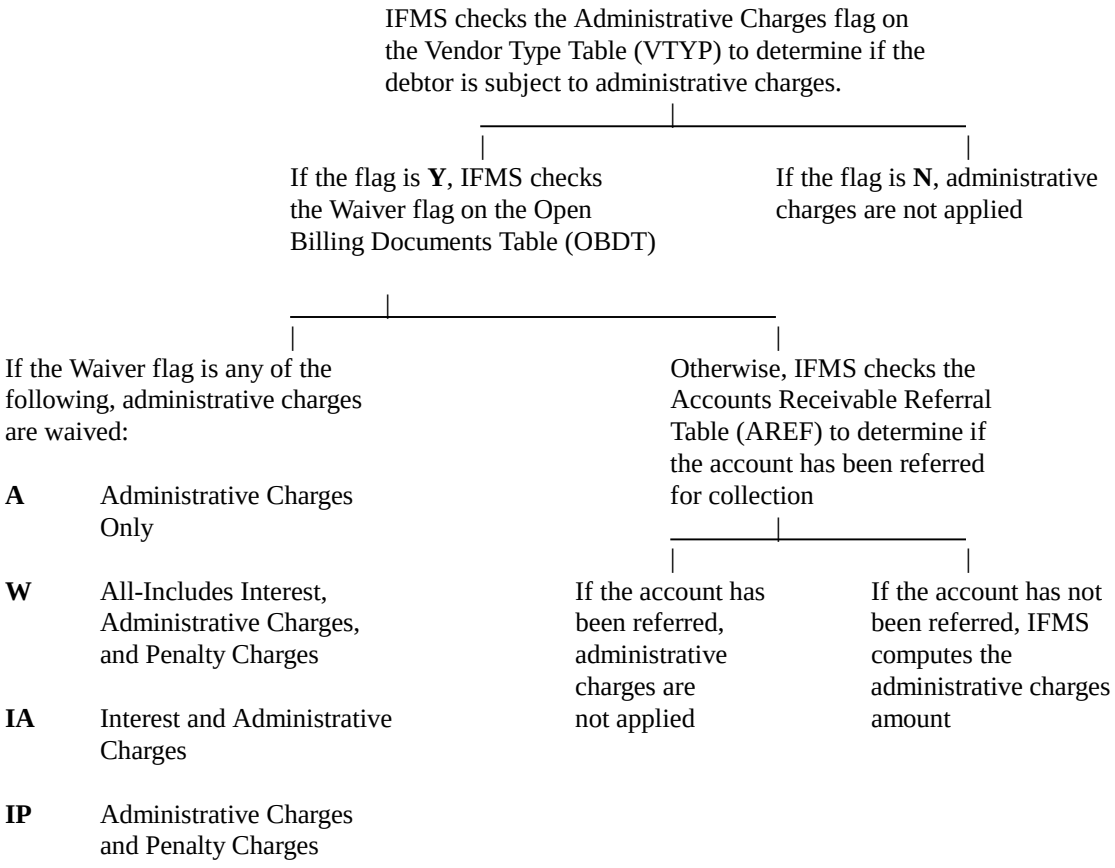


Exhibit 24

Step 3. IFMS Computes the Administrative Charge Amount

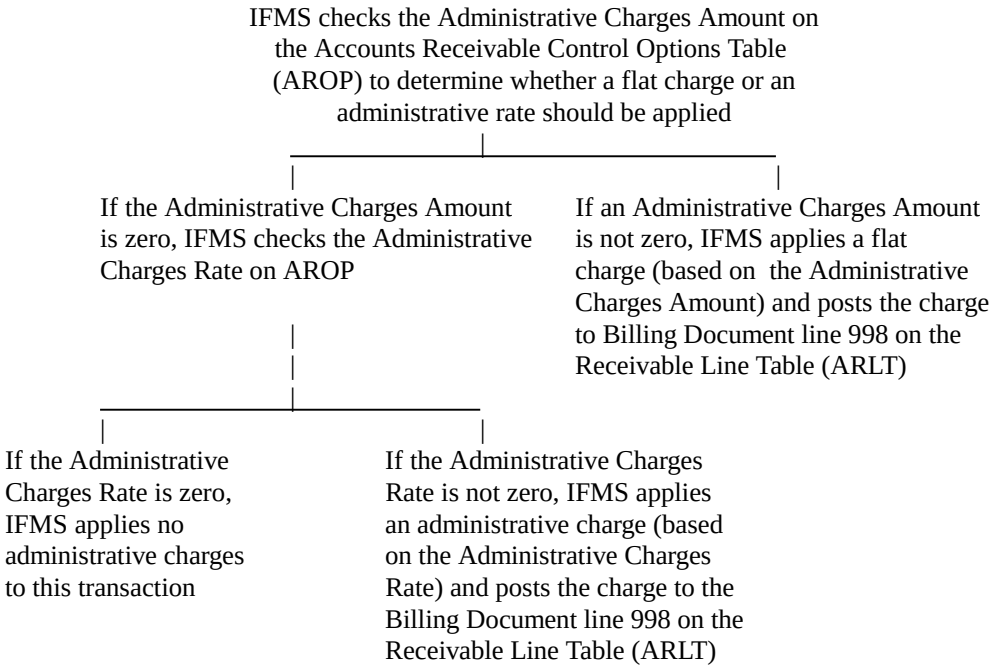


Exhibit 25

How IFMS Calculates Administrative Charges

Once IFMS determines that administrative charges should be applied, IFMS calculates the amount of the flat rate or an administrative rate.

Flat Rate

If the administrative charge is a flat rate or a dollar amount (e.g., $10.00), IFMS posts the charge to the Billing Document (BD) line number 998 on the Receivable Line Table (ARLT) using the accounting dimensions specified on the Accounts Receivable Control

Options Table (AROP). Exhibit 26 shows how the flat rate is determined:

Flat Rate Calculation

Total Administrative Charges Days =	To Date parameter - (specified when the overdue charges batch process is run)	Administrative Charges Apply Date (or Collection Due Date if this is the first time administrative charges are applied)

Administrative Charges Period =	Total Administrative Charges Days / Administrative Charges Days on AROP

Administrative Charges Flat Rate =	[	Flat Rate	]	[	Administrative Charges Period (truncated)	]

Exhibit 26

Administrative Rate

If the administrative charge is a percentage, IFMS determines the administrative amount in the same way that interest charges are calculated (see exhibit 27):

Interest Charge Calculations

Administrative Charges Amount =	[	Outstanding Principal* Admin. Charges Rate / Days in the Year	]	[	Admin. Charges Days	]

The following calculations are used to determine the administrative charges amount:

Administrative Charges Days =	[	Administrative Charges Period Truncated to a Whole Number	]	[	Administrative Charges Days on AROP	]

Administrative Charges Period =	Total Administrative Charges Days / Administrative Charges Days on AROP

Total Administrative Charges Days =	To Date parameter - (specified when the overdue charges batch process is run)	Administrative Charges Apply Date (or Collection Due Date if this is the first time administrative charges are applied)

Exhibit 27

Administrative Charges Example

Suppose:

- You enter a Billing Document (BD), subject to administrative charges, for $100.00
- A bill was sent on September 15, 1992 with a Collection Due Date of October 15, 1992
- The To Date parameter is November 25, 1992, and you've received no collection for the receivable
- The Accounts Receivable Control Options Table (AROP) specifies that the administrative charge is a flat charge of $15.00, and the administrative charges lag days is 30 days

First, IFMS calculates the Total Administrative Charges Days (Exhibit 28):

Total Administrative Charges Days =	To Date - Collection Date parameter
=	November 25, 1992 - October 15, 1992
=	41 days

Exhibit 28

Next, IFMS calculates the Administrative Charges Period (Exhibit 29):

Administrative Charges Period =	Total Administrative Charges Days / Administrative Charges Days on AROP
=	41 Days / 30 Days
=	1.367

Exhibit 29

After determining the Administrative Charges Periods, IFMS calculates the amount of the flat charge as shown in Exhibit 30:

Flat Charge Amount =	[	Flat Charge Amount on AROP	]	[	Administrative Charge Period Truncated	]
=		(15.000)(1.000)				
=		15.00				

Exhibit 30

The total amount of administrative charges applied to this Billing Document is $15.00.

Applying Penalty Charges to Receivables

A **penalty charge** is a charge to the debtor to discourage paying bills late. There are two types of penalty charges: a flat charge or a

penalty (percentage) rate. You specify the type of charge that you want IFMS to use on the Accounts Receivable Control Options Table (AROP).

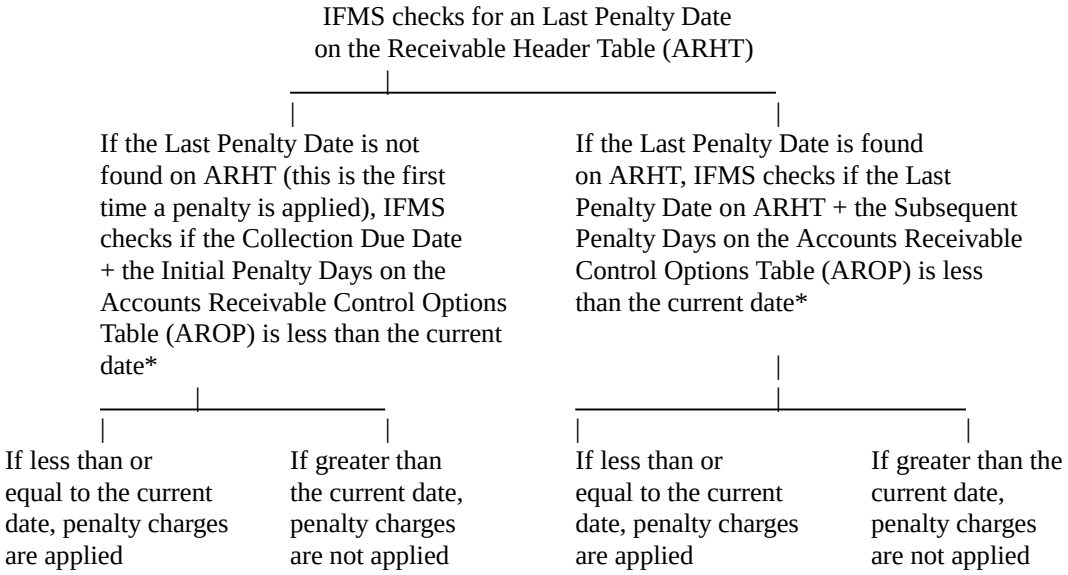
The exhibits (31-33) that follow depict how IFMS:

Selects receivables for penalty charges

Determines if the penalty should be applied or waived

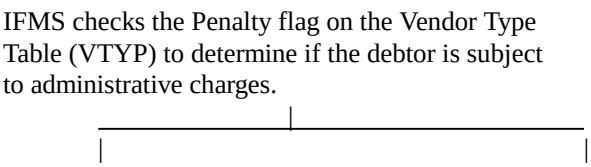
Computes the penalty amount

Step 1. IFMS Selects Receivables for Penalty Charges



*** The current date is the date that the Overdue Charges batch process is run**

Exhibit 31
Step 2. IFMS Determines if Penalty Charges Should be Applied or Waived



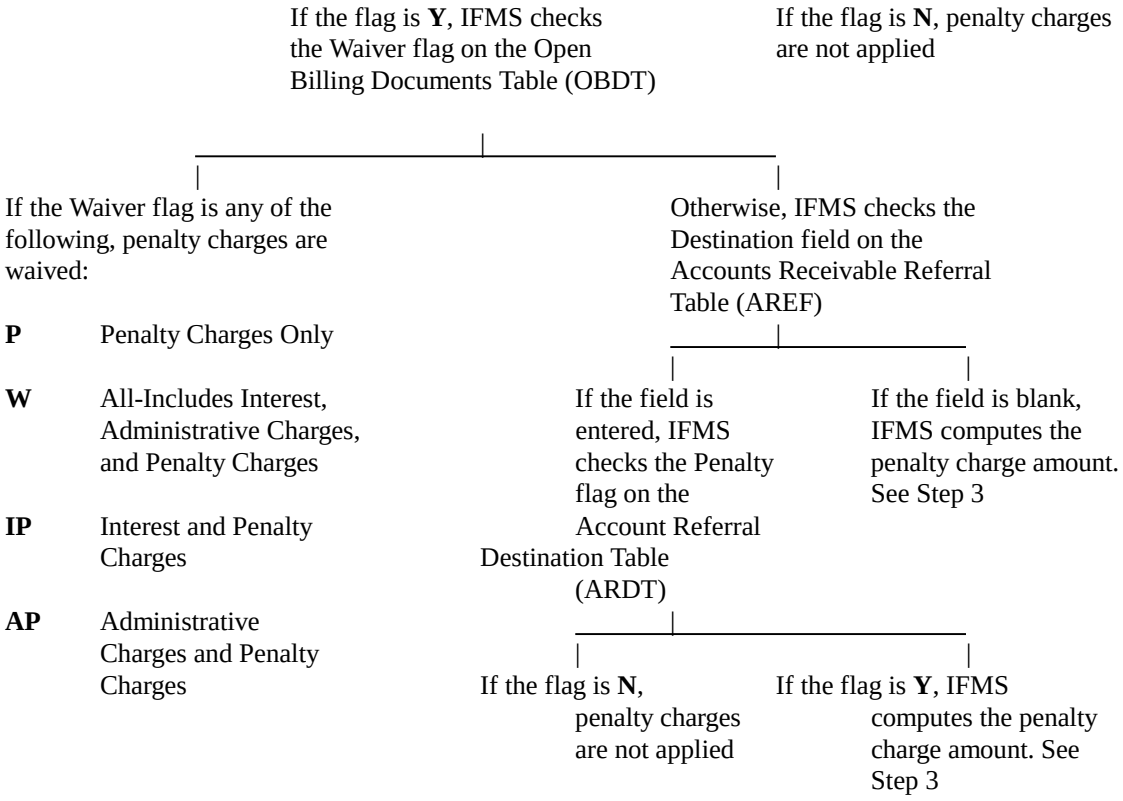

If the flag is **Y**, IFMS checks the Waiver flag on the Open Billing Documents Table (OBDT)
If the flag is **N**, penalty charges are not applied
If the Waiver flag is any of the following, penalty charges are waived:
Otherwise, IFMS checks the Destination field on the Accounts Receivable Referral Table (AREF)
P Penalty Charges Only
W All-Includes Interest, Administrative Charges, and Penalty Charges
IP Interest and Penalty Charges
AP Administrative Charges and Penalty Charges
If the field is entered, IFMS checks the Penalty flag on the Account Referral Destination Table (ARDT)
If the field is blank, IFMS computes the penalty charge amount. See Step 3
If the flag is **N**, penalty charges are not applied
If the flag is **Y**, IFMS computes the penalty charge amount. See Step 3

Exhibit 32

Step 3. IFMS Computes the Penalty Amount

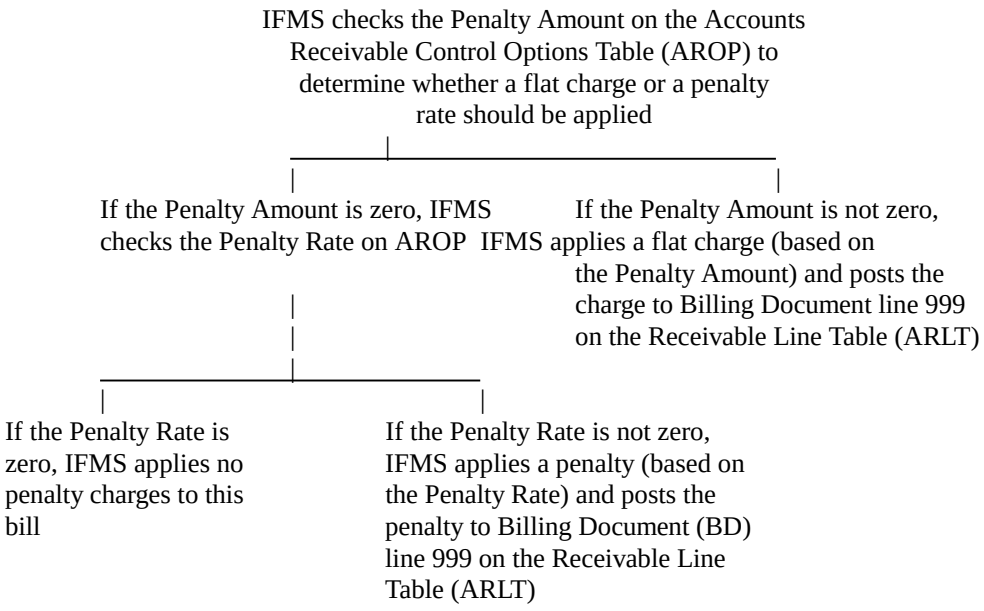


Exhibit 33

How IFMS Calculates Penalty Charges

Once IFMS determines that penalty charges should be applied, IFMS calculates the amount of the flat rate or a penalty rate.

Flat Rate

If the penalty charge is a flat rate or a dollar amount, IFMS posts the charge to the Billing Document (BD) line number 999 on the Receivable Line Table (ARLT) using the accounting dimensions specified on the Accounts Receivable Control Options Table (AROP). The flat rate only applies to one period. The flat rate is determined as follows (Exhibit 34):

Interest Days Calculation

Penalty Flat Rate = [Initial Penalty Periods] [Flat Amount]

Initial Penalty Periods = Total Initial Penalty Days / Initial Penalty Days on AROP

Exhibit 34

Penalty Rate

If the penalty charge is a percentage, IFMS determines the penalty amount in the same way that interest and administrative charges are calculated. Note that the following equation is only used the first time that the penalty charge is applied (Exhibit 35):

Interest Amount Calculation

$$\text{Penalty Amount} = \left[\text{Outstanding Principal Amount}^* \times \frac{\text{Penalty Rate}}{\text{Days in the Year}} \right] \left[\text{Penalty Days} \right]$$

Exhibit 35

The following calculations are used to determine the Penalty Days (Exhibit 36):

Interest Days Calculation

$$\text{Penalty Days} = \left[\text{Initial Penalty Periods truncate to whole period} \right] \left[\text{Initial Penalty Days on AROP} \right]$$

$$\text{Initial Penalty Periods} = \frac{\text{Total Initial Penalty Days}}{\text{Initial Penalty Days on AROP}}$$

$$\text{Total Initial Penalty Days} = \text{To Date parameter}^* \text{ - (specified when the Overdue Charges Batch process is run)} \quad \text{Collection Due Date}$$

Exhibit 36

After IFMS applies the first penalty charge, any subsequent penalty charges are determined using the following equations (Exhibits 37 and 38):

Interest Amount Calculation

$$\text{Subsequent Penalty Amount} = \left[\text{Outstanding Principal Amount*} \times \frac{\text{Penalty Rate}}{\text{Days in the Year}}\right] \left[\text{Subsequent Penalty Days}\right]$$

Exhibit 37

The following calculations are used to determine the Subsequent Penalty Days:

Interest Days Calculation

$$\text{Subsequent Penalty Days} = \left[\text{Subsequent Penalty Periods truncated to whole number}\right] \left[\text{AROP Subsequent Penalty Days}\right]$$

$$\text{Subsequent Penalty Periods} = \frac{\text{Total Subsequent Penalty Days}}{\text{AROP Subsequent Penalty Days}}$$

$$\text{Total Subsequent Penalty Days} = \text{To Date parameter* - Penalty Apply Date}$$

(specified when the Overdue Charges Batch process is run)

Exhibit 38

? Note

When installment bills incur penalties, IFMS automatically cancels the installment plan, and sets the Active Indicator to **N** on the Installment Billing and Payment Table (INBT).

Penalty Example

Suppose:

- You enter a Billing Document (BD), subject to a penalty charge, for $100.00
- A bill was sent on August 15, 1992, with a Collection Due Date of September 14, 1992
- The Current Date is November 25, 1992, and you've received no collection for the receivable
- On the Accounts Receivable Control Options Table (AROP), the Initial Penalty Days are 30 days, the Subsequent Penalty Days is 30 days, and the Penalty Rate is 6%

First, IFMS calculates the Total Initial Penalty Days (Exhibit 39):

Total Initial Penalty Days =	To Date - Collection Date parameter
=	November 25, 1992 - September 14, 1992
=	72 days

Exhibit 39

Next, IFMS calculates the Initial Penalty Period (Exhibit 40):

Initial Penalty Period =	$\frac{\text{Total Penalty Days}}{\text{Initial Penalty Days on AROP}}$
=	$\frac{72 \text{ Days}}{30 \text{ Days}}$
=	2.400 days

Exhibit 40

After determining the number of penalty periods, IFMS calculates the Penalty Days as shown in Exhibit 41:

Penalty Days =	[	Initial Penalty Periods truncated to a whole number	]	[	Initial Penalty Days on AROP	]
=	[	2.400 truncated to 2.000	]	[	30 days	]
=		60.00				

Exhibit 41

Now, IFMS can calculate the Penalty Amount using the values calculated above (Exhibit 42).

Interest Amount Calculation

Penalty Amount =	[	Outstanding Principal Amount × Penalty Rate / Days in the Years	]	[	Penalty Days	]
=	[	(100.00)(.06) / 366 (for leap year)	]	[	60 days	]
=	(.016)(60)					
=	.96					

Exhibit 42

The total amount of the penalty applied to this Billing Document is 96 cents.

Subsequent Penalty Example

Suppose that 30 days passes, and the receivable is still outstanding. Because IFMS has already applied a penalty charge to the receivable, IFMS calculates any additional penalty charges using Subsequent Penalty Days.
First, IFMS calculates the Total Subsequent Penalty Days (Exhibit 43):

Total Subsequent Penalty Days =	To Date - Penalty Apply Date parameter
=	December 25, 1992 - November 25, 1992
=	30 days

Exhibit 43

Next, IFMS calculates the Subsequent Penalty Period (Exhibit 44):

Subsequent Penalty Period =	Total Subsequent Penalty Days / Subsequent Penalty Days on AROP

=		30 Days 30 Days
=		1 day

Exhibit 44

After determining the number of Subsequent Penalty periods, IFMS calculates the Subsequent Penalty Days as shown in Exhibit 45:

Subsequent Penalty Days =	[	Subsequent Penalty Periods truncated to a whole number	]	[	Subsequent Penalty Days on AROP	]
=	[	1	]	[	30 days	]
=	30 days					

Exhibit 45

At this point, IFMS can calculate the Subsequent Penalty Amount (Exhibit 46):

Interest Amount Calculation

Subsequent Penalty Amount =	[	Outstanding Principal Amount Penalty Rate / Days in the Years	]	[	Subsequent Penalty Days	]
=	[	(100.00)(.06) / 366 (for leap year)	]	[	30 days	]
=	(.016)(30)					
=	.48					

Exhibit 46

This results in IFMS applying of 48 cents additional penalty charges to the receivable.

Creating Dunning Letters

A **dunning letter** is a notice to a debtor that a receivable is overdue. In IFMS, dunning letters are created when you run an offline batch program. This program selects receivables from the

Open Billing Documents Table (OBDT) for which dunning letters should be generated for.

You can specify that different text be printed on a dunning letter depending on the age category of the receivable. The receivable's age category is the amount of days that the receivable is overdue (e.g., 30, 60, or 90 days). For example, the text for Age Category 3, which corresponds to 60 days, is "This receivable is 60 days overdue". When the receivable is 60 days overdue, IFMS prints this text on the dunning letter.
You enter additional text that you want printed on the dunning letter on the Clause Text Table (CLTX) or the Accounts Receivable Text Table (ARTX). For information on how to enter text for printing on dunning letters, see the Accounts Receivable Tables chapter of the *IFMS User's Guide*.

In addition, IFMS will reprint notices if the Reprint Date parameter is specified. Any receivable on the Outstanding Billing Documents Table (OBDT) with the Last Dunning Date equal to the Reprint Date parameter will be selected.
Exhibits 47 and 48 show how IFMS selects receivables and determines which text should be printed on dunning letters.

? Note

IFMS will not create dunning notices for continuous bills, and only three dunning notices can be sent for a specific bill.

Step 1. IFMS Selects Billing Documents for which IFMS Should Generate Dunning Letters

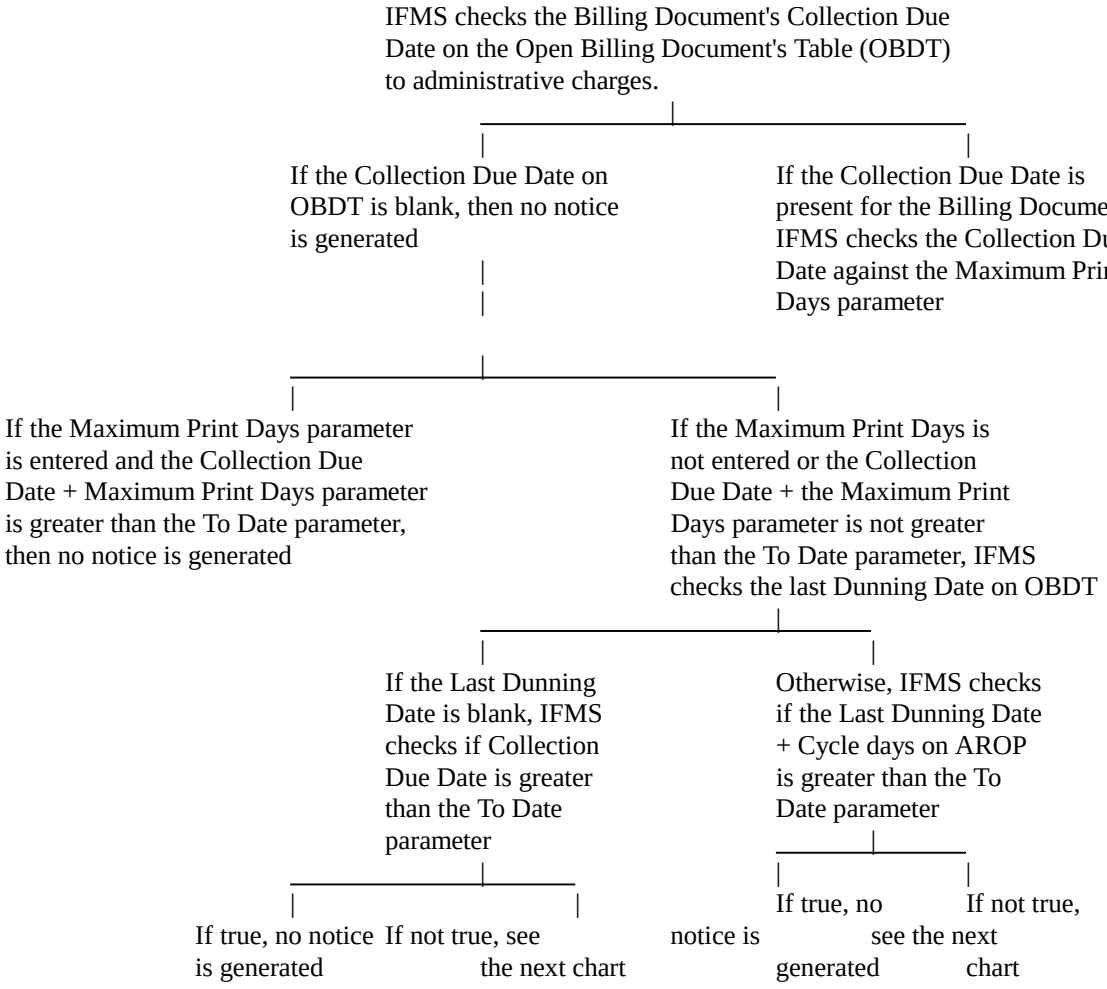


Exhibit 47

Step 1. (cont.)

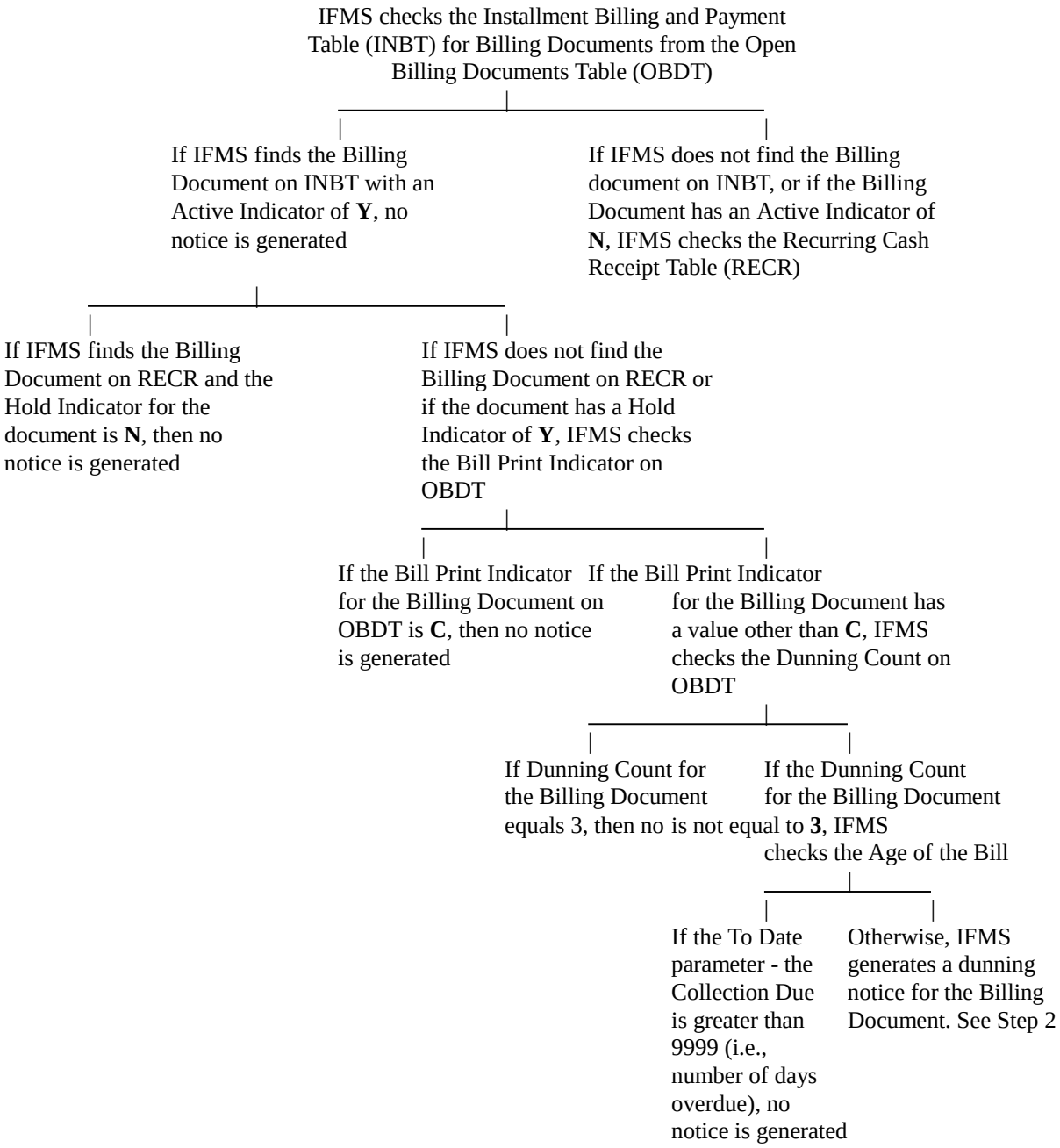


Exhibit 47 (continued)

Step 2. Determines the Text to be Printed on the Dunning Letter

IFMS determines the text to be printed on the dunning notices by calculating the Days overdue:

Days Overdue = To Date parameter - Collection Due Date or Last Dunning Date

Compares the Days Overdue to the highest Age Category (in this diagram Age Category 3)

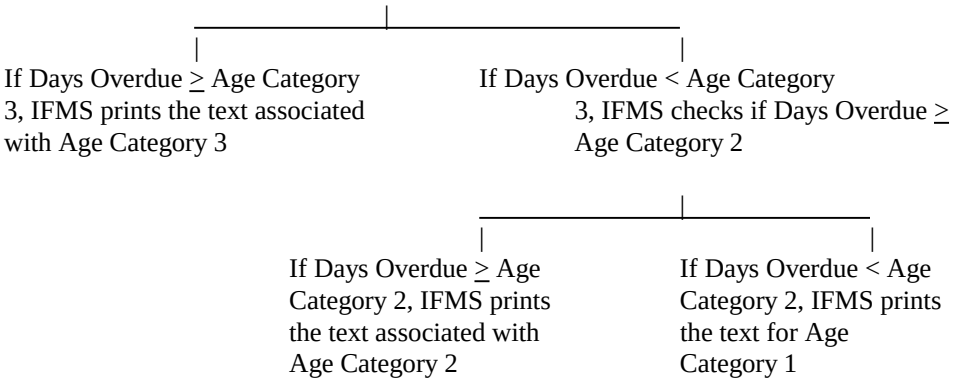


Exhibit 48

Writing-Off Bad Debts

A **write-off** is the transfer of the balance of a receivable into a loss account. For example, if a debtor becomes bankrupt or otherwise unable to pay his obligations, the amount that he owes would be a written off as a loss. If a receivable cannot be collected, there are two methods that you can use to record the write-off amount:

Manually create a Cash Receipt (CR) that specifies that the receivable is a write-off (a transaction with a transaction category equal to CR). See Chapter 2 of this volume for more information.

Run the offline batch processes that select receivables for write-off and automatically creates the Cash Receipt.

The second method is discussed in greater detail below.

Selecting Receivables for Write-Off

You can run an offline batch process that selects receivables for write-off from the Receivable Header and Line Tables (ARHT and ARLT) and the Outstanding Billing Documents Table (OBDT). The program selects receivables for write-off if they are 120 days past the collection due date.

All receivables that IFMS selects for write-off are placed on the Write-off Table (WROT). The key field is Accounting Point (AP) so all receivables for a particular AP appear together. The payer ID, BD ID, total bill amount including interest, handling and penalty, the last dunning date and the overdue status code are taken from the OBDT table. A receivable must be included on OBDT for it to be selected for inclusion on WROT.

Then, an authorized user approves the receivables that IFMS selected for write-off by accessing the Write-off table and setting the Write-off flag to **Y**.

For all receivables with a Write-off flag of **Y**, another offline batch process creates Cash Receipts (using the write-off transaction code WR) with an amount equal to the outstanding receivable, and stores these transactions on the Document Suspense File (SUSF) for review. When processed, the Cash Receipts record the actual write-off, liquidate the receivable, remove the Billing Document (BD) from the Outstanding Billing Documents table, and update the Accounts Receivable tables.

? Note

You cannot write-off the receivable if it has been referred for collection.

Entering Debit Vouchers

A **debit voucher** (SF-5515) is a negative cash receipt. An example of how you would use a debit voucher is to record a bounced check.

To create a debit voucher, enter negative amounts on the Cash Receipt (CR) by entering a **D** in the Increase/Decrease Indicator on the Cash Receipt line.

Usually, you record the receipt of cash by entering a Cash Receipt (CR). In cases where a receivable incurs interest, administrative charges, or penalty charges, you must calculate the amount of the charges, and enter each amount on a separate Cash Receipt line.

When you process the Cash Receipts, IFMS liquidates the referenced receivable amounts, including interest, administrative charges, and penalty charges.

Archiving the Accounts Receivable Case History Line Table (ARCL)

By running an offline batch process, you can archive records from the Accounts Receivable Case History Line Table (ARCL). IFMS will only archive records if:

- The current balance of the receivable is zero
- The fiscal year in which the last activity for the receivable is equal to the fiscal year that you selected for the archive process

Reclassifying an Overdue Travel Advance as a Receivable

To reclassify an overdue travel advance as a receivable, enter the following information on a Cash Receipt (CR):

The employee or vendor code

The number of the advance

The type of travel

If the travel is obligated, enter the Travel Order transaction code and the document number (do not enter the line number)

When you reclassify a travel advance as a receivable, IFMS liquidates the travel advance from the Travel Advance tables, and reclassifies the advance as an outstanding receivable on the Accounts Receivable tables.

Offline Procedures

The General Ledger Detail Balance Inquiry Table (GLDB), the General Ledger Balance Inquiry Table (GLBL), and the Monthly Summary General Ledger Balance Inquiry Table (MSGL) are updated during the nightly cycle for all transactions processed since the last nightly cycle.

In addition to the General Ledger updates, the following Accounts Receivable processes/updates occur during the nightly cycle:

The Outstanding Billing Document Table (OBDT):

Selects standard and installment bills to be printed. The ARHT and the OBDT tables are updated when bills are printed.

Generates interest, penalties, and administrative charges for overdue bills. The ARLT, ARHT and OBDT tables are updated with these charges.

Generates dunning notices. The ARHT and OBDT tables are updated when dunning notices are generated.

Selects overdue accounts, and update the WROT table.

Summary

Using the Accounts Receivable subsystem, you can record the collection of funds, bill customers for items and services, apply interest, administrative charges, and penalty charges to overdue receivables, and select receivables for write-off or referral to collection agencies.

An accounts receivable chain is the series of accounting procedures and paper flows that your agency uses when billing customers and collecting funds. In IFMS, an accounts receivable chain is a combination of accounting transactions that encompass one of the following accounting events: revenue recognition, balance sheet transfer, and expenditure refund. Each of these accounting events are represented to IFMS by Accounts Receivable transactions: Billing Documents (BDs) and Cash Receipt (CRs). You can link together each transaction in your accounts receivable chain by using referencing.

Using the Accounts Receivable subsystem, you can track the billing and collection of receipts, create receivables to bill for any amounts due your agency, and run an offline process to print bills. After bills are printed and sent to debtors, you can record the collection of funds, bill for overdue charges, such as interest, administrative charges, and penalty charges, create dunning letters, track debt appeals, write-off bad debts, and refer accounts to outside collection agencies.